

PATENT COOPERATION TREATY

From the
INTERNATIONAL PRELIMINARY EXAMINING

PCT

NOTIFICATION OF TRANSMITTAL OF INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Rule 71.1)

To: KOH, Manho 6F., Jeollabukdo Small & Medium Business Support Center, 337-2 Palbok-dong 1-ga, Deokjin-gu, Jeonju-si, Jeollabuk-do, 561-841, Republic of Korea		Date of mailing <i>(day/month/year)</i> 22 OCTOBER 2004 (22.10.2004)
Applicant's or agent's file reference 2003lhy02		IMPORTANT NOTIFICATION
International application No. PCT/KR2003/001250	International filing date <i>(day/month/year)</i> 25 JUNE 2003 (25.06.2003)	Priority date <i>(day/months/year)</i> 29 JUNE 2002 (29.06.2002)
Applicant Lee, Hee-young		

<ol style="list-style-type: none"> 1. The applicant is hereby notified that International Preliminary Examining Authority transmits here with the international preliminary examination report and its annexes, if any, established on the international application. 2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices. 3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices. 4. REMINDER The applicant must enter the national phase before each elected office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301). Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned. For further details in the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

Name and mailing address of the IPEA/KR Korean Intellectual Property Office 920 Dunsan-dong, Seo-gu, Daejeon 302-701, Republic of Korea Facsimile No. 82-42-472-7140	Authorized officer COMMISSIONER Telephone No. 82-42-481-5198	
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PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

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Applicant's or agent's file reference 2003lhy02	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/KR2003/001250	International filing date (day/month/year) 25 JUNE 2003 (25.06.2003)	Priority date (day/month/year) 29 JUNE 2002 (29.06.2002)
International Patent Classification (IPC) or national classification and IPC IPC7 A61B 17/16		
Applicant Lee, Hee-young		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.



2. This REPORT consists of a total of 4 sheets, including this cover sheet.

☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 29 JANUARY 2004 (29.01.2004)	Date of completion of this report 19 OCTOBER 2004 (19.10.2004)
Name and mailing address of the IPEA/KR  Korean Intellectual Property Office 920 Dunsan-dong, Seo-gu, Daejeon 302-701, Republic of Korea Facsimile No. 82-42-472-7140	Authorized officer YOON, Kuk Sup Telephone No. 82-42-481-5612 

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International Application No.

PCT/KR2003/001250

I. Basis of the report

1. With regard to the elements of the international application: *

☒ the international application as originally filed☐ the description:

pages _____, as originally filed
pages _____, filed with the demand
pages _____, filed with the letter of _____

☐ the claims:

pages _____, as originally filed
pages _____, as amended (together with any statement) under Article 19
pages _____, filed with the demand
pages _____, filed with the letter of _____

☐ the drawings:

pages _____, as originally filed
pages _____, filed with the demand
pages _____, filed with the letter of _____

☐ the sequence listing part of the description:

pages _____, as originally filed
pages _____, filed with the demand
pages _____, filed with the letter of _____

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language _____ which is

☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).☐ the language of publication of the international application (under Rule 48.3(b)).☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

☐ contained in the international application in written form.☐ filed together with the international application in computer readable form.☐ furnished subsequently to this Authority in written form.☐ furnished subsequently to this Authority in computer readable form.☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.4. ☐ The amendments have resulted in the cancellation of:☐ the description, pages _____☐ the claims, Nos. _____☐ the drawings, sheet _____5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this opinion as "originally filed." and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item I and annexed to this report.

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**1. Statement**

Novelty (N)	Claims	1-7	YES
	Claims	None	NO
Inventive step (IS)	Claims	1-7	YES
	Claims	None	NO
Industrial applicability (IA)	Claims	1-7	YES
	Claims	None	NO

2. Citations and explanations (Rule 70.7)

Reference is made to the following document which is written in international search report.

D1 : US 5643304(1 June 1997)

1. Novelty

Claim 1 of the present invention concerns a facial bone contouring device comprising a rasp including a rod, a cutter with a plurality of grooves for exhausting cut bone fragments, a saline solution feeding passage and a bone fragment exhausting passage formed in the cutter; a handpiece ; a saline feeding unit; and a suction unit.

The closest prior art is given by the document D1. This document discloses(cf. Fig 2-4, abstract, column 7 line 56 - column 8 line 37, column 11 line 41 - column 11 line 61) a minimally invasive tissue removal apparatus comprising vacuum generator(28), vacuum line(29), fluid pressure line(120), outlet ports(109) through which fluid passes and helps clean the rasp teeth(107), and rasp teeth(107).

While claim 1 of the present invention discloses a plurality of grooves for exhausting cut bone fragments, outlet ports(109) disclosed in the most closest prior art D1 are not for exhausting cut bone fragments. And claim 1 of the present invention discloses a rasp including a saline solution feeding passage, a bone fragment exhausting passage and a cutter with a plurality of grooves, but D1 does not discloses the rasp and cutter structure of the present invention.

(Continued on Supplemental Sheet.)

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International Publication No.

PCT/KR2003/001250

Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of:

Thus, claim 1 is novel under Article 33(2) PCT.
As a consequence, its dependent claims 2-7 are also novel.

Box V.

2. Inventive Step

Claim 1 of the present invention is intended to present a facial bone contouring device which can be inserted beneath the skin via a small-sized incision and continuously cut bone at a cutting site into very small sized fragments, thus easily controlling the cutting amount of bone and drastically reducing the risk of medical accidents.

The solution according to claim 1 is a plurality of grooves for exhausting cut bone fragments of the rasp structure mentioned above(novelty).

D1 discloses outlet ports(109) through which fluid passes and helps clean the rasp teeth(107), rasp teeth(107), vacuum line(29), and fluid pressure line(120).

However, the small outlet ports in D1 can be plugged by bone fragments, thus bone cutting shall not be accomplished efficiently and the structure of the rasp of D1 must be larger than that of claim1 in the present invention.

Since the rasp structure and a plurality of grooves of the present invention are not disclosed in the prior art, moreover which cannot be suggested by disclosed prior art, claim 1 of the present invention is not considered to be obvious to a person skilled in the art with the knowledge of the prior art.

Thus, the invention in claim 1 is inventive under Article 33(3) PCT.
As a consequence,, its dependent claims 2-7 are also inventive.

3. Industrial applicability

Claims 1-7 fulfil the requirement of Article 33(4) PCT.